

CURRICULUM VITAE

VERE GERALD SMYTH

Born: 15 February 1949

Sex: Male

Place of birth: Timaru, New Zealand

Nationality: New Zealand, United Kingdom

Marital status: divorced

Education:

1954-61 Waimataitai Primary School, Timaru

1962-66 Timaru Boys High School

1967-70 Physics Dept., University of Canterbury, NZ

1971-73 Mathematics Dept., University of Canterbury, NZ

1978-82 Agricultural Engineering Dept., University of Canterbury, NZ

2005-06 International Boatbuilding Training College, UK

Educational achievements:

1964 NZ School Certificate

1966 NZ Junior National Scholarship

1970 BSc(Hons) 2(1) in physics

1973 MSc in applied mathematics

1982 PhD in meteorology

2006 Diploma in Practical Boatbuilding (with distinction)

Employment:

1978-82 Research Fellow, Agricultural Engineering Dept., University of Canterbury, Lincoln, NZ.

1982-2005 Scientist/Senior Scientific Advisor, National Radiation Laboratory, Christchurch, NZ.

2008 (part time consultant) Principal Research Scientist, National Physical Laboratory, Teddington, England.

2009-2010 Scientific coordinator of ALLEGRO Project (FP7 EURATOM), Department of Nuclear and Theoretical Physics, University of Pavia, Italy

2011-2015 Scientific consultant for EC-Euratom Network of Excellence DoReMi, Department of Physics, University of Pavia, Italy

Professional interests:

1978-82: Research into New Zealand's wind energy resource. This involved collecting and analysing windflow data, computer modelling of windflow over complex terrain, and modelling national energy supply and demand.

1982-90: Work as a research scientist for NZ primary standards laboratory for radiation exposure. This involved writing an in-house Monte Carlo computer code to simulate primary ionisation chambers for the purpose of calculating correction factors. Among other things this led to the discovery of a fundamental fault in the “condensed history” electron transport algorithm used in most internationally used Monte Carlo codes.

1990-2000: Development and application of radiation therapy dosimetry protocols. Initially this involved adapting the IAEA protocol TRS-277 for use in hospitals in NZ and Australia, then from 1997-2000 as one of the authors of the absorbed dose protocol TRS-398.

1985-2005: Radiation safety. Development of national codes of safe practice in radiation therapy and nuclear medicine. Writing parliamentary papers seeking to update the NZ radiation safety legislation.

1982-2005: Medical physics. Member of the Australasian College of Physical Scientists and Engineers in Medicine. NZ Branch chairman 2003-4.

2009-10: Consulting for the EC-EURATOM project ALLEGRO on the risks to normal tissue following radiotherapy using current and emerging modalities; preparation of the project proposal, participation in grant negotiations, membership of the Management and Coordination Group, and contribution to scientific tasks.

2010-2015: Consulting for the EC-EURATOM Network of Excellence DoReMi on development of EC research capability into the health risks from exposure to low doses of ionising radiation; collaboration in formulation of the Training and Education Workpackage, collaboration on preparation of calls to organise European courses in radiobiology.

2011-2015: Consulting for the EC-EURATOM project ANDANTE on the risks of cancer from exposure to neutrons; preparation of the successful project proposal, participation in grant negotiations, membership of the Management and Coordination Group, and contribution to scientific tasks.

2011-2015 Coordinator for the EMRP (European Metrology Research Programme) project MetroMRT (Metrology in support of molecular radiotherapy). Successful coordination and management of the project to completion.

2015 -: Consulting for the H2020 European Joint Programme CONCERT; Work Package 7, Training and Education in support of research into radiation protection.

2016 -: Participation in project MRTDosimetry (Metrology for clinical implementation of dosimetry in molecular radiotherapy) supported by the European Metrology Programme for Innovation and Research (EMPIR).